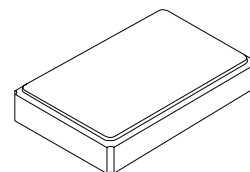


Preliminary




XTL1021G

**16.000000 MHz
Crystal Unit**



SM2520-4 Case

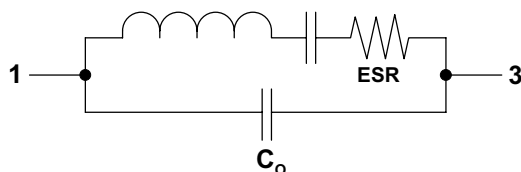
- **Ultra-miniature Surface Mount Seam-weld Package**
- **Good Frequency Stability over Temperature**
- **Excellent Reliability**
- **Complies with Directive 2002/95/EC (RoHS)** 

The XTL1021G is a surface mount 2.5 x 2.0 x 0.6 mm crystal unit for use in wireless telecommunications devices, especially where an ultra-miniature package is required.

Electrical Characteristics

| Characteristic | Sym | Notes | Minimum | Typical | Maximum | Units |
|--|-------|-------|---|-----------|---------|------------|
| Nominal Frequency | F_O | | | 16.000000 | | MHz |
| Load Capacitance | C_L | | | 12 | | pF |
| Mode of Vibration | | | Fundamental | | | |
| Drive Level | | | | 10 | | μ W |
| Frequency Make Tolerance | F_L | | ± 10 ppm @ 25 °C ± 3 °C | | | ppm |
| Resistance | ESR | | | | 100 | Ω |
| Static Shunt Capacitance | C_O | | | 3.0 | | pF |
| Insulation Resistance, 100 VDC | | | 500 | | | M Ω |
| Frequency Stability Over Operating Temperature Range | | | ± 10 ppm (referred to the value at 25 °C) | | | |
| Storage Temperature Range | | | -40 | | 85 | °C |
| Aging | | | | | ± 1 | ppm/yr |
| Operating Temperature Range | | | -10 | | 60 | °C |
| Standard Shipping Quantity on 178 mm (7") Reel | | | | 3000 | | units |
| Lid Symbolization | | | 3M // <u>YW</u> | | | |

Crystal Equivalent Circuit



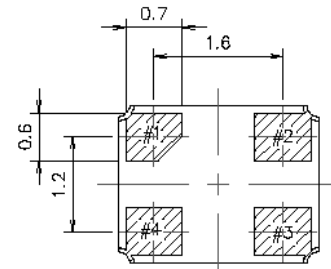
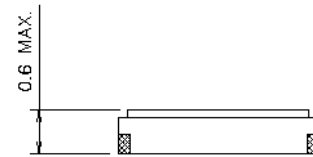
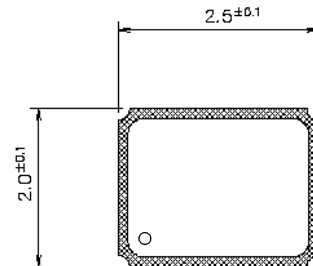
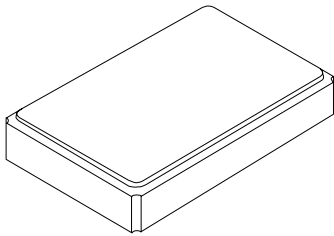
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

Notes:

1. The design, manufacturing process, and specifications of this device are subject to change without notice.

SM2520-4 Case

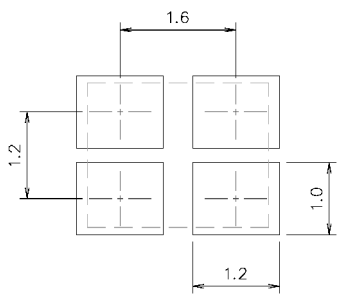
4-Terminal Surface-Mount Case 2.5 x 2.0 mm Nominal Footprint



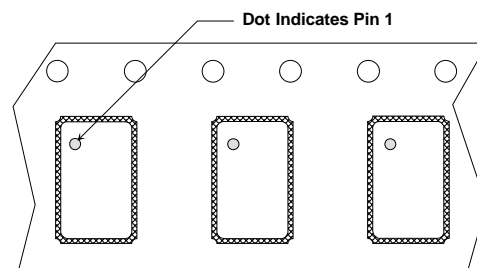
Package Dimensions (mm)

Electrical Connections

| Pin | Connection |
|-----|------------|
| 1 | IN/OUT |
| 2 | GND |
| 3 | IN/OUT |
| 4 | GND |

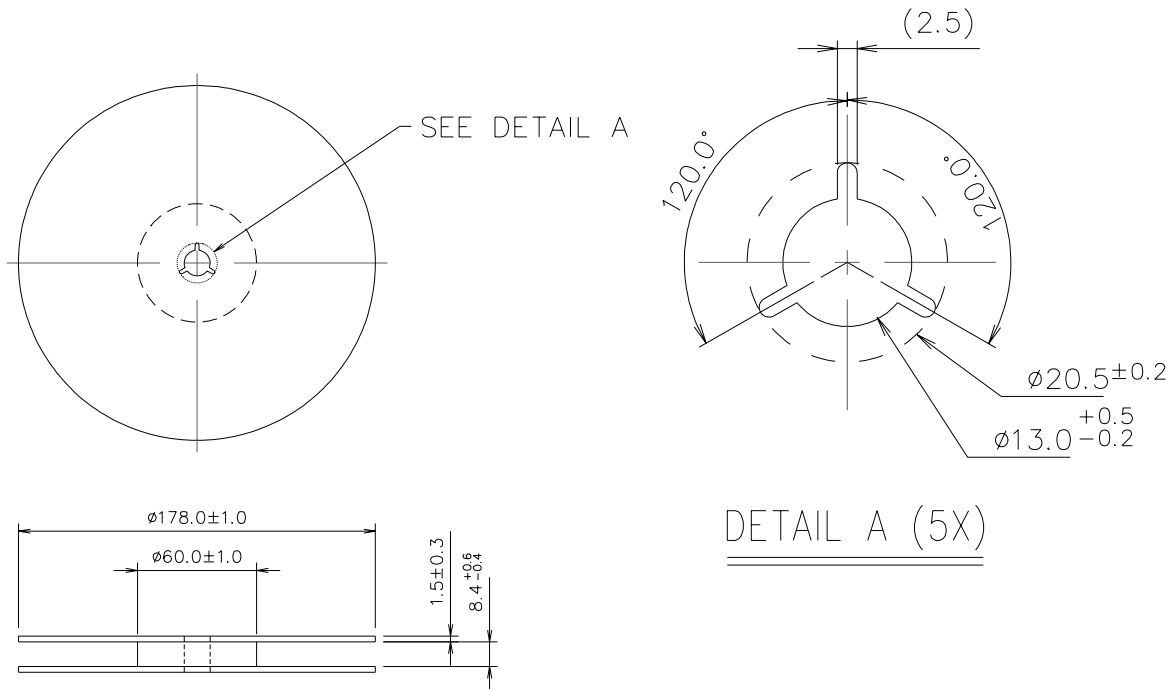


Land Pattern (mm)



Package Orientation in Carrier Tape

Reel Dimensions



Tape Dimensions

